

Work Order ID 61838

Page 1

Tuesday, September 07, 2010 3:18:48 PM

Item ID: D3500-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Saddle

Start Date: 9/7/2010

Start Qty: 20.00



Cust Item ID:

Required Date: 9/13/2010

Req'd Qty: 20.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop


**Sequence ID/
Work Center ID**
**Operation
Description**
**Set Up/
Run Hours**

Tool ID

Tool

**Plan
Code**
**Accept
Qty**
**Reject
Qty**
**Reject
Number**
**Insp.
Stamp**
Draw Nbr**Revision Nbr**

100



HAAS 1

HAAS CNC vertical machine #1

HAAS CNC VERTICAL MACHINING #1

0.00

b.a 11/01/10

20

0

110



QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

0.00

b.a 11/01/10

20

0

120



QC

Quality Control

QC8- Inspect parts - second check

0.00

b.a 11/01/13

20

0

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61838

Tuesday, September 07, 2010 3:18:48 PM



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Item ID: D3500-1

Accept



Setup Start



Revision ID:

Item Name: Saddle

Stop



Start Date: 9/7/2010 Start Qty: 20.00



Cust Item ID:

Required Date: 9/13/2010 Req'd Qty: 20.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130



Chemical Conversion Coat per QSI005 4.1

0.00

HandFinish

Hand Finishing

20 8 11/6/13

140



White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

M115951

Powdercoat

Powder Coating

Memo 0.00

START TIME: 10:25 OVEN TEMPERATURE:
FINISH TIME: 10:55

20 8 11/01/14.

150



QC3- Inspect Part Finish

0.00

QC

Quality Control

Memo 0.00

Cecil 10/12 20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61838

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Tuesday, September 07, 2010 3:18:48 PM

Item ID: D3500-1

Accept



Setup Start



Revision ID:

Item Name: Saddle

Stop



Start Date: 9/7/2010 Start Qty: 20.00



Cust Item ID:

Required Date: 9/13/2010 Req'd Qty: 20.00



Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center ID

160



Packaging

Packaging

Operation
DescriptionIdentify as per dwg & Stock Location: 425Set Up/
Run Hours

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

170



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

11/1/17 202 S

11/01/17 JH

MF

11-01-17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, September 07, 2010 3:18:52 PM

Page 1

Work Order ID: 61838



Parent Item: D3500-1



Parent Item Name: Saddle

Start Date: 9/7/2010

Required Date: 9/13/2010

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP Rev:A New Issue 06-06-15 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6102-013 		Manufactured	No			100	Each	37.0000	1	20			

Saddle Billet

Location	Loc Qty	Loc Code
MAT43	37	
59467	3	
60713	8	
61300	26	

62010

20.0

B.A 11/01/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD			Work Order:	61938
Description: Saddle			Part Number:	D3500-1
Inspection Dwg: D3500 Rev: C			Page 1 of 5	

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.483	0.490		0.486	0.486	0.486	0.486	Vern	6A-01
B	1.175	1.185		1.180	1.180	1.180	1.180	"	"
C	3.145	3.155		3.150	3.150	3.150	3.150	"	"
D	1.175	1.185		1.180	1.180	1.180	1.180	"	"
E	0.365	0.385		0.375	0.375	0.375	0.375	"	"
F	0.490	0.510		0.499	0.499	0.499	0.499	"	"
H									
I	R1.575	R1.595		1.5807	1.5848	1.5863	1.585	Dial	HAAS 2
J	0.240	0.260		0.253	0.250	0.250	0.250	Vern	6A-01
K	0.490	0.510		0.500	0.500	0.500	0.500	"	"
L	3.590	3.650		3.620	3.620	3.620	3.620	"	"
M	0.315	0.322		0.317	0.317	0.317	0.317	"	"
N	0.256	0.262		0.259	0.259	0.259	0.259	"	"
O	6.500	6.520		6.510	6.510	6.510	6.510	Vern	GNK-02
P	5.990	6.010		6.000	6.000	6.000	6.000	"	"
Q	2.820	2.830		2.825	2.825	2.825	2.825	Vern	6A-01
R	2.495	2.505		2.500	2.500	2.500	2.500	"	"
S	2.245	2.255		2.250	2.250	2.250	2.250	"	"
T	1.120	1.130		1.125	1.125	1.125	1.125	"	"
U	0.540	0.560		0.553	0.551	0.551	0.551	"	"
V	0.793	0.803		0.798	0.798	0.798	0.798	"	"
W	R.240	R.260		0.250	0.250	0.250	0.250	R-6	ref.
X	0.040	0.060		0.050	0.050	0.050	0.050	Vern	6A-01
Y	0.100	0.120		0.110	0.110	0.110	0.110	"	"
AA	R1.125	R1.145		1.129	1.1327	1.1342	1.1327	Dial	HAAS 2
AB	R.490	R.510		0.500	0.500	0.500	0.500	R-6	ref.
AC	0.615	0.635		0.625	0.625	0.625	0.625	Vern	6A-01
AD	0.240	0.260		0.254	0.252	0.251	0.251	"	"
AE	1.810	1.830		1.823	1.821	1.821	1.821	"	"
AF	0.240	0.260		0.250	0.249	0.249	0.249	"	"
AG	0.140	0.160		0.151	0.153	0.154	0.152	"	"
AH	0.140	0.160		0.159	0.158	0.158	0.159	"	"
AI	0.140	0.160		0.153	0.152	0.153	0.153	"	"
Accept/Reject									

Measured by:	B.A	Audited by:	CHZ
Date:	11/01/10	Date:	11/01/13

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC	CHZ

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD				Work Order:	61931
Description: Saddle				Part Number:	D3500-1
Inspection Dwg: D3500 Rev: C				Page 2 of 5	

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	15	76	77	78	By	Date
A	0.483	0.490		0.486	0.486	0.486	0.486	/	/
B	1.175	1.185		1.180	1.180	1.180	1.180	/	/
C	3.145	3.155		3.150	3.150	3.150	3.150	/	/
D	1.175	1.185		1.180	1.180	1.180	1.180	/	/
E	0.365	0.385		0.375	0.375	0.375	0.375	/	/
F	0.490	0.510		0.497	0.497	0.498	0.499	/	/
H									
I	R1.575	R1.595		1.586	1.5851	1.5852	1.5856		
J	0.240	0.260		0.248	0.251	0.258	0.249		
K	0.490	0.510		0.500	0.500	0.500	0.500		
L	3.590	3.650		3.620	3.620	3.620	3.620		
M	0.315	0.322		0.317	0.317	0.317	0.317		
N	0.256	0.262		0.259	0.259	0.259	0.259		
O	6.500	6.520		6.510	6.510	6.510	6.510		
P	5.990	6.010		6.000	6.000	6.000	6.000		
Q	2.820	2.830		2.825	2.825	2.825	2.825		
R	2.495	2.505		2.500	2.500	2.500	2.500		
S	2.245	2.255		2.250	2.250	2.250	2.250		
T	1.120	1.130		1.125	1.125	1.125	1.125		
U	0.540	0.560		0.550	0.550	0.550	0.550		
V	0.793	0.803		0.798	0.798	0.798	0.798		
W	R.240	R.260		0.250	0.250	0.250	0.250		
X	0.040	0.060		0.050	0.050	0.050	0.050		
Y	0.100	0.120		0.110	0.110	0.110	0.110		
AA	R1.125	R1.145		1.1338	1.1331	1.1328	1.1326		
AB	R.490	R.510		0.500	0.500	0.500	0.500		
AC	0.615	0.635		0.625	0.625	0.625	0.625		
AD	0.240	0.260		0.253	0.254	0.253	0.253		
AE	1.810	1.830		1.823	1.823	1.823	1.823		
AF	0.240	0.260		0.250	0.250	0.250	0.250		
AG	0.140	0.160		0.152	0.152	0.150	0.152		
AH	0.140	0.160		0.159	0.156	0.158	0.158		
AI	0.140	0.160		0.155	0.155	0.155	0.156		
Accept/Reject									

Measured by:	H. A	Audited by:	<i>Ch</i>
Date:	11/01/11	Date:	11/01/13

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC <i>Ch</i>	<i>DA</i>

DART AEROSPACE LTD			Work Order:	61931
Description: Saddle			Part Number:	D3500-1
Inspection Dwg: D3500 Rev: C			Page 3 of 5	

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	19	20	21	22	By	Date
A	0.483	0.490		0.486	0.486	0.486	0.486		
B	1.175	1.185		1.180	1.180	1.180	1.180		
C	3.145	3.155		3.150	3.150	3.150	3.150		
D	1.175	1.185		1.180	1.180	1.180	1.180		
E	0.365	0.385		0.375	0.375	0.375	0.375		
F	0.490	0.510		0.498	0.498	0.498	0.498		
H									
I	R1.575	R1.595		1.5854	1.5852	1.5852	1.5853		
J	0.240	0.260		0.248	0.249	0.249	0.249		
K	0.490	0.510		0.500	0.500	0.500	0.500		
L	3.590	3.650		3.620	3.620	3.620	3.620		
M	0.315	0.322		0.317	0.317	0.317	0.317		
N	0.256	0.262		0.259	0.259	0.259	0.259		
O	6.500	6.520		6.510	6.510	6.510	6.510		
P	5.990	6.010		6.000	6.000	6.000	6.000		
Q	2.820	2.830		2.825	2.825	2.825	2.825		
R	2.495	2.505		2.500	2.500	2.500	2.500		
S	2.245	2.255		2.250	2.250	2.250	2.250		
T	1.120	1.130		1.125	1.125	1.125	1.125		
U	0.540	0.560		0.550	0.550	0.550	0.550		
V	0.793	0.803		0.798	0.798	0.798	0.798		
W	R.240	R.260		0.250	0.250	0.250	0.250		
X	0.040	0.060		0.050	0.050	0.050	0.050		
Y	0.100	0.120		0.110	0.110	0.110	0.110		
AA	R1.125	R1.145		1.1324	1.1328	1.1326	1.1328		
AB	R.490	R.510		0.500	0.500	0.500	0.500		
AC	0.615	0.635		0.625	0.625	0.625	0.625		
AD	0.240	0.260		0.253	0.253	0.253	0.253		
AE	1.810	1.830		1.823	1.823	1.823	1.823		
AF	0.240	0.260		0.250	0.250	0.250	0.250		
AG	0.140	0.160		0.152	0.152	0.152	0.152		
AH	0.140	0.160		0.157	0.158	0.157	0.159		
AI	0.140	0.160		0.155	0.156	0.155	0.155		
Accept/Reject									

Measured by:	R.A	Audited by:	<i>Am</i>
Date:	11/01/11	Date:	11/01/13

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC <i>Am</i>	<i>Am</i>

DART AEROSPACE LTD				Work Order:	61931
Description: Saddle				Part Number:	D3500-1
Inspection Dwg: D3500 Rev: C				Page 4 of 5	

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	113	114	115	116	By	Date
A	0.483	0.490		0.486	0.486	0.486	0.486		
B	1.175	1.185		1.180	1.180	1.180	1.180		
C	3.145	3.155		3.150	3.150	3.150	3.150		
D	1.175	1.185		1.180	1.180	1.180	1.180		
E	0.365	0.385		0.375	0.375	0.375	0.375		
F	0.490	0.510		0.500	0.499	0.499	0.500		
H									
I	R1.575	R1.595		1.5853	1.5852	1.5856	1.5856		
J	0.240	0.260		0.248	0.248	0.248	0.248		
K	0.490	0.510		0.500	0.500	0.500	0.500		
L	3.590	3.650		3.620	3.620	3.620	3.620		
M	0.315	0.322		0.317	0.317	0.317	0.317		
N	0.256	0.262		0.259	0.259	0.259	0.259		
O	6.500	6.520		6.510	6.510	6.510	6.510		
P	5.990	6.010		6.000	6.000	6.000	6.000		
Q	2.820	2.830		2.825	2.825	2.825	2.825		
R	2.495	2.505		2.500	2.500	2.500	2.500		
S	2.245	2.255		2.250	2.250	2.250	2.250		
T	1.120	1.130		1.125	1.125	1.125	1.125		
U	0.540	0.560		0.550	0.550	0.550	0.550		
V	0.793	0.803		0.798	0.798	0.798	0.798		
W	R.240	R.260		0.250	0.250	0.250	0.250		
X	0.040	0.060		0.050	0.050	0.050	0.050		
Y	0.100	0.120		0.110	0.110	0.110	0.110		
AA	R1.125	R1.145		1.133	1.1331	1.1328	1.1327		
AB	R.490	R.510		0.500	0.500	0.500	0.500		
AC	0.615	0.635		0.625	0.625	0.625	0.625		
AD	0.240	0.260		0.253	0.253	0.253	0.253		
AE	1.810	1.830		1.823	1.823	1.823	1.823		
AF	0.240	0.260		0.250	0.250	0.250	0.250		
AG	0.140	0.160		0.151	0.153	0.153	0.152		
AH	0.140	0.160		0.158	0.159	0.158	0.158		
AI	0.140	0.160		0.155	0.154	0.155	0.155		
Accept/Reject									

Measured by:	B.A	Audited by:	Amr
Date:	11/01/12	Date:	11/01/13

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC	JK M

DART AEROSPACE LTD			Work Order:	01938
Description: Saddle			Part Number:	D3500-1
Inspection Dwg: D3500 Rev: C			Page 5 of 5	

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	17	18	19	20	By	Date
A	0.483	0.490		0.486	0.486	0.486	0.486		
B	1.175	1.185		1.180	1.180	1.180	1.180		
C	3.145	3.155		3.150	3.150	3.150	3.150		
D	1.175	1.185		1.180	1.180	1.180	1.180		
E	0.365	0.385		0.375	0.375	0.375	0.375		
F	0.490	0.510		0.499	0.499	0.499	0.500		
H									
I	R1.575	R1.595		1.5852	1.5854	1.5854	1.5851		
J	0.240	0.260		0.248	0.249	0.248	0.248		
K	0.490	0.510		0.500	0.500	0.500	0.500		
L	3.590	3.650		3.620	3.620	3.620	3.620		
M	0.315	0.322		0.317	0.317	0.317	0.317		
N	0.256	0.262		0.259	0.259	0.259	0.259		
O	6.500	6.520		6.510	6.510	6.510	6.510		
P	5.990	6.010		6.000	6.000	6.000	6.000		
Q	2.820	2.830		2.825	2.825	2.825	2.825		
R	2.495	2.505		2.500	2.500	2.500	2.500		
S	2.245	2.255		2.250	2.250	2.250	2.250		
T	1.120	1.130		1.125	1.125	1.125	1.125		
U	0.540	0.560		0.550	0.550	0.550	0.550		
V	0.793	0.803		0.798	0.798	0.798	0.798		
W	R.240	R.260		0.250	0.250	0.250	0.250		
X	0.040	0.060		0.050	0.050	0.050	0.050		
Y	0.100	0.120		0.110	0.110	0.110	0.110		
AA	R1.125	R1.145		1.1332	1.1328	1.1326	1.1331		
AB	R.490	R.510		0.500	0.500	0.500	0.500		
AC	0.615	0.635		0.625	0.625	0.625	0.625		
AD	0.240	0.260		0.253	0.253	0.253	0.253		
AE	1.810	1.830		1.823	1.823	1.823	1.823		
AF	0.240	0.260		0.250	0.250	0.250	0.250		
AG	0.140	0.160		0.151	0.151	0.152	0.151		
AH	0.140	0.160		0.158	0.158	0.157	0.159		
AI	0.140	0.160		0.155	0.155	0.155	0.155		
Accept/Reject									

Measured by:	8.0	Audited by:	On
Date:	11/01/12	Date:	11/01/13

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC	2/11/13

SHOP COPY

RETURN TO

ENGINEER

UNCONTROLLED

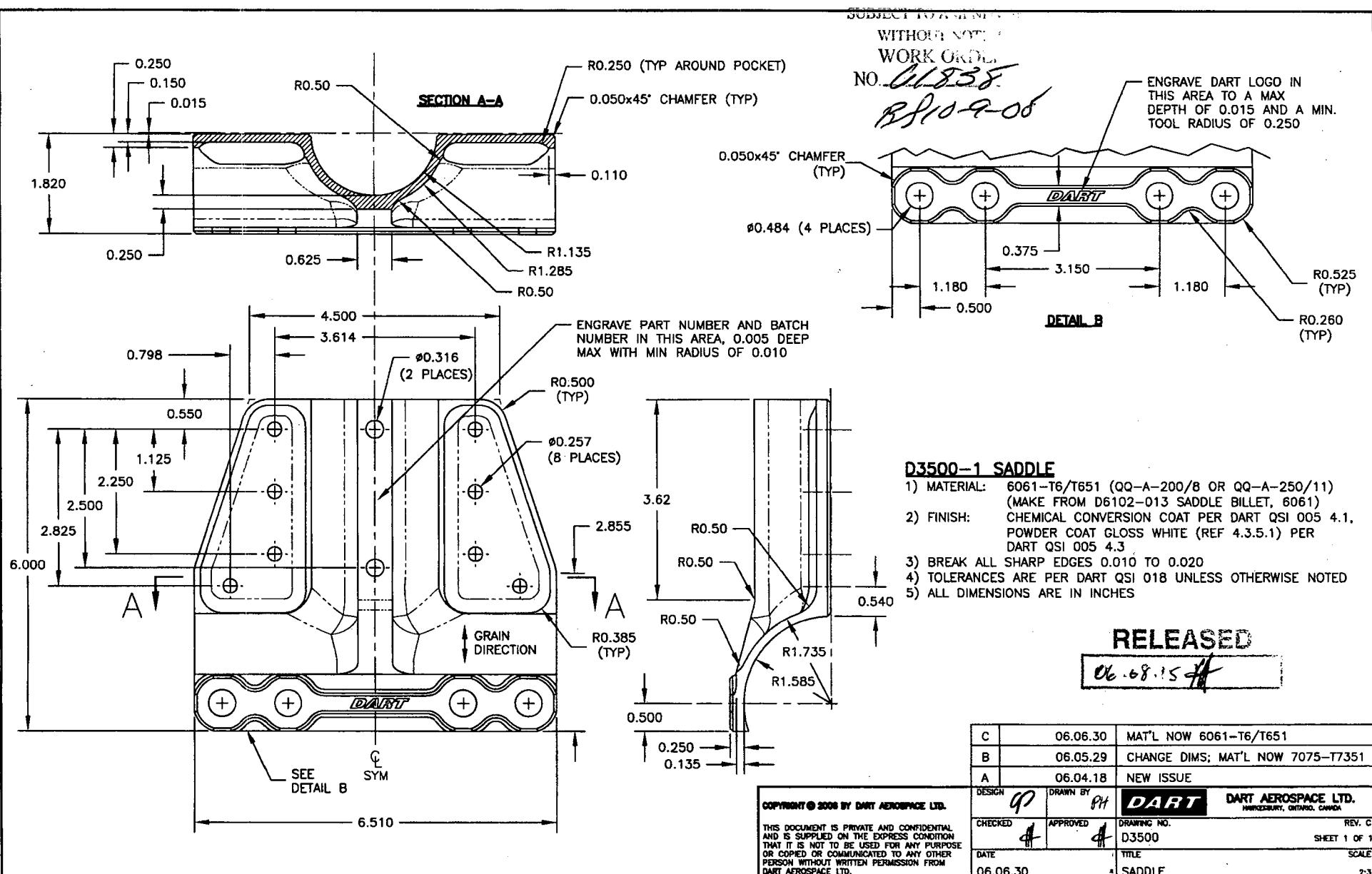
SUBJECT TO A WORK ORDER

WITHOUT NOTE

WORK ORDER

NO. *01838**BB109-08*

ENgrave DART logo in this area to a max depth of 0.015 and a min. tool radius of 0.250



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries